The \texttt{l3docstrip} package
Code extraction and manipulation

The \LaTeX\textsuperscript{X3} Project\textsuperscript{*}
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1 Extending DocStrip

The \texttt{l3docstrip} module adds \LaTeX\textsuperscript{X3} extensions to the DocStrip program for extracting code from .dtx. As such, this documentation should be read along with that for DocStrip.

2 Internal functions and variables

An important consideration for \LaTeX\textsuperscript{X3} development is separating out public and internal functions. Functions and variables which are private to one module should not be used or modified by any other module. As \TeX{} does not have any formal namespacing system, this requires a convention for indicating which functions in a code-level module are public and which are private.

Using \texttt{l3docstrip} allows internal functions to be indicated using a “two part” system. Within the .dtx file, internal functions may be indicated using \texttt{@@} in place of the module name, for example

\begin{verbatim}
\cs_new_protected:Npn \@@_some_function:nn #1#2
{%
 % Some code here
}
\tl_new:N \l_@@_internal_tl
\end{verbatim}

To extract the code using \texttt{l3docstrip}, the “guard” concept used by DocStrip is extended by introduction of the syntax \%<@@=<\texttt{module}>. The \texttt{(module)} name then replaces the \texttt{@@} when the code is extracted, so that

\begin{verbatim}
\%<package>
\%<@@=foo>
\cs_new_protected:Npn \@@_some_function:nn #1#2
{%
 % Some code here
}
\tl_new:N \l_@@_internal_tl
\%</package>
\end{verbatim}

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is extracted as

\cs_new_protected:Npn \__foo_some_function:nn #1#2
  {
    % Some code here
  }
\tl_new:N \l__foo_internal_tl

where the \_\_ indicates that the functions and variables are internal to the foo module.

Use \@@ to obtain @@ in the output (\@@@@@ to get @@@). For longer pieces of code the replacement can be completely suppressed by giving an empty module name, namely using the syntax %<@@=>.